## **Abstract**

The invention relates to physical chemistry and can be used for adjusting the rate of autocatalytic hydrogenation reactions.

The method for producing a palladium-containing hydrogenation catalyst consists in reducing divalent palladium from the initial compound thereof and precipitating the thus reduced palladium on a carbon material, wherein, according to said invention, the initial compound is embodied in the form of tetra aqua-palladium (II) perchlorate. The reduced palladium is precipitated on a nano-carbon material which can be embodied in the form of fullerene  $C_{60}$ , carbon nanotubes, cathodic deposit and the mixture of  $C_{60}$  and  $C_{70}$  fullerenes at the following ratio thereof: 60-80 mass % fullerene  $C_{60}$  and 20-40 mass % fluorine  $C_{70}$ .

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The invention makes it possible to develop the method for producing a palladium-containing hydrogenation catalyst which exhibits a higher catalytic activity and operates in softer conditions (at a room temperature and a normal (atmospheric) pressure).